

The Australian Curriculum: Technologies describes two distinct but related subjects: Design and Technologies, in which students use design thinking and technologies to generate and produce designed solutions for authentic needs and opportunities and Digital Technologies, in which students use computational thinking and information systems to define, design and implement digital solutions.

Technologies aims to develop the knowledge, understanding and skills to ensure that, individually and collaboratively, students:

investigate, design, plan, manage, create and evaluate solutions
are creative, innovative and enterprising when using traditional, contemporary and emerging technologies, and understand how technologies have developed over time
make informed and ethical decisions about the role, impact and use of technologies in the economy, environment and society for a sustainable future
engage confidently with and responsibly select and manipulate appropriate technologies materials, data, systems, components, tools and equipment – when designing and creating solutions
critique, analyse and evaluate problems, needs or opportunities to identify and create solutions.

PREP

Design and Technology

During Term 4 Prep students will be identifying how people design and produce familiar environments. They will be considering, sustainability and how this meets personal and local community needs. The students will be extending their learning of special places from within their classroom and will be exploring the needs or opportunities for designing special places by creating models. The students will also have an opportunity to visit and report on some special places within their community.

YEAR 1

Design and Technology

The year 1 students will be describing the purpose of familiar products and environments and how these products meet the needs of users. This will be done by combining the learning from within the classroom subjects, Science and Health with the Technology Curriculum. The students will be studying bees and will be investigating how plants and animals affect bees and the production of honey. There will also be an incursion from a local Beekeeper to assist with their learning.

YEAR 2

Digital Technologies

In Term 4, Year 2 will be exploring how people safely use common information systems to meet information, communication, and recreation needs. The students will be investigating the use of the internet and the safety precautions needed when using the internet.

Design and Technology

The Year 2 students will also be identifying the features and uses of technologies for the prescribed technology context, food specialization. They will be exploring how food should be prepared for healthy eating. The students will be taking part in science experiments to assist in their learning of food hygiene and health. This unit will enhance what they are learning within their classroom.

YEAR 3

Design and Technologies

In Term 4, students will be exploring energy, particularly Solar-powered energy. We will be learning all about the Bridgestone World Solar Challenge and some of the roles and occupations of the people involved. Students will investigate some of the design technologies used in the challenge and how these meet our current and future needs. We will further explore solar power as a renewable source of energy and how we can transfer energy using solar panels and other components. Students will create and test their own solar oven.

YEAR 4

Design and Technologies

Our topic this term, *Crash Test Dummies*, looks at force and aligns itself with one of the Year 4 Science topics. We will be working from the Design and Technologies Curriculum. During this unit students will be introduced to what engineers do. They will examine the safety features of moving vehicles that help protect the people inside. They will also examine the forces that are involved during a crash. Students will work collaboratively to solve an engineering problem. They will need to draw upon their mechanical engineering skills and knowledge of car safety to design, build and then test a prototype car.

YEAR 5

Design and Technologies

Let's Get it Moving is our Term 4 topic for Year 5. This unit covers aspects of the Design and Technologies Curriculum. Students will be learning all about design engineers and their characteristics. They will investigate how these engineers meet our present and future needs and identify some of the competing considerations made in the design of their products. Students will be following an engineering design process as they plan and create a *Marvellous Marble Run* that attempts to outlast their peers' design. They will learn to select and use appropriate technologies and techniques correctly and safely and after testing and improving their designed solution, students will finally evaluate their designs against their criteria for success.

YEAR 6

Digital Technologies and Design and Technologies

This term students will be focusing on sustainability as they work from both the Digital and the Design and Technologies Curriculums. Our Minecraft Island Colony unit aims to allow students the opportunity to show they can create a sustainable colony on a remote island. They need to be aware of the resources they have available and how they can best be used to create a sustainable colony. Year 6 will also be focusing on sustainability within the context of food and fibre technologies. They will be learning about the role of Oz Harvest, an Australian organisation dedicated to aiding students to better understand sustainable solutions with regards to food. We hope to experience some practical cooking activities to support our learning within this context.